HYUNDAI

SERVICE COMMUNICATION

TO	Hyundai Service Managers Hyundai Parts Managers	**SUBJECT**	**Campaign 103 – Clock Spring Replacement** (TSB#11-01-052)
FROM	Hyundai Motor America National Service Department		
DATE	November 3, 2011	**MODELS**	2007-2008 Santa Fe 2007-2008 Veracruz

Customer letters for the above recall campaign will be sent out beginning November 7, 2011 in eight waves. Due to parts availability on this recall campaign, customers were notified of two actions:

- If the "air bag" warning lamp REMAINS ON when their vehicle is running, they should bring their vehicle to a Hyundai dealer for diagnosis and repair.
- If the "air bag" warning lamp does NOT REMAIN ON when the vehicle is running, the driver's air bag will operate properly and Hyundai asks that the customer **not have this recall repair performed** at this time because sufficient quantities of the necessary parts are not yet available for all vehicles.

Hyundai Dealer Process

Parts for this campaign will NOT be eligible for dealer order. Hyundai Motor America will ship an initial allocation of parts for this campaign to your dealership based on the units in operation in your market area that fall under this recall campaign. Replacement parts will be automatically shipped to you as soon as your Service Department submits campaign claims for completed repairs. Submit campaign claims as soon as the repairs are completed.

HYUNDAI

BEST PRACTICES FOR CAMPAIGN 103

Step 1	**Check Hyundai Online Service Scheduling (Xtime) Daily**	✓ Customers have been advised to schedule an online appointment ✓ Your appointment ledger will show CAMP103 in the "services" column ✓ Check part availability at least the day before customer's visit ✓ If no part available, contact the customer to determine: o If the Air Bag Warning Lamp is NOT ON, follow the procedure under Step 2 below o If the Air Bag Warning Lamp IS ON, follow the procedure under Step 4 below
Step 2	**Air Bag Warning Lamp is NOT ON**	✓ Advise the customer that since the air bag warning lamp is not on, their driver's air bag will operate properly. ✓ **DO NOT COMPLETE THE CAMPAIGN AT THIS TIME** because sufficient quantities of the necessary parts are not yet available for all vehicles ✓ If, in the future, their air bag warning lamp remains on when their vehicle is running, then the customer should make an appointment with your dealership for diagnosis and repair
Step 3	**Air Bag Warning Lamp is ON** (and part is available)	✓ Diagnose and repair the customer's vehicle pursuant to TSB #11-01-052 ✓ File your campaign claim as soon as the repairs are completed
Step 4	**Air Bag Warning Lamp is ON** (and part is NOT available)	✓ Provide the customer with a service rental car until the part is available ✓ Make sure your Service Department has submitted all previous campaign claims. If all claims have been submitted, and you still need additional parts, contact the Hyundai Parts Call Center via email (HyundaiPartsHotline@mobisusa.com) • **Include the following information in the e-mail:** a. Subject line on email should say **Campaign 103 Parts Needed** b. Dealer Code c. Dealer Contact Name and Phone # d. VIN e. Parts Numbers f. Order Quantity (should be one part number per VIN) As soon as the part is available, a replacement will be sent to your dealership

REMINDER: HMA WILL ALLOCATE A REPLACEMENT PART AS SOON AS A CAMPAIGN CLAIM IS SUBMITTED

HYUNDAI NEW THINKING. NEW POSSIBILITIES. **Technical Service Bulletin**	GROUP **CAMPAIGN**	NUMBER **11-01-052**
	DATE **November, 2011**	MODEL(S) **Santa Fe (CM) Veracruz (EN)**
Subject:	CLOCK SPRING REPLACEMENT (Campaign 103)	

★ IMPORTANT

***** Retail Vehicles *****

Dealers must perform this recall campaign on all affected vehicles in inventory and whenever an affected vehicle is in the shop for any maintenance or repair.

When a vehicle arrives at the service department, access Hyundai Motor America's "Warranty Vehicle Information" screen via WEBDCS to identify open Campaigns.

Description: This bulletin provides the service procedure for replacing the clock spring assembly.

2007 – 2008 Santa Fe: Pages 3 – 11
2007 – 2008 Veracruz: Pages 12 – 16

Applicable Vehicles: 2007-2008 Model Year Santa Fe (CM) **Produced:** 4/19/2006 – 3/20/2008
2007-2008 Model Year Veracruz (EN) **Produced:** 12/26/2006 – 3/21/2008

Parts Information:

VEHICLE	PART NAME	PART #	QTY
Santa Fe	Clock Spring	93490-2B300-QQH	1
Veracruz	Clock Spring	93490-3J100-QQH	1

SST Information:

DESCRIPTION	SST PART #
Steering wheel remover	09561-11001

Warranty Information:

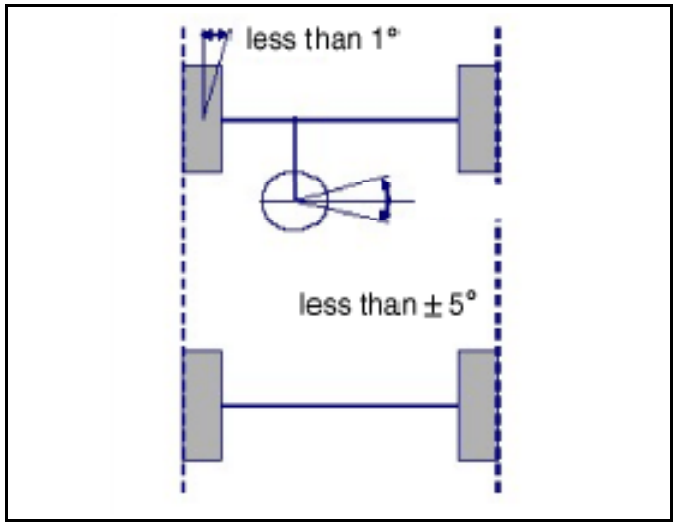
VEHICLE	OP CODE	OPERATION	OP TIME
Santa Fe	11C101R1	Clock spring replacement	0.5 MH
Veracruz	11C101R0	Clock spring replacement	0.5 MH

NOTE: Submit Claim on Campaign Claim Entry Screen

Circulate To: General Manager, Service Manager, Parts Manager, Warranty Manager, Service Advisors, Technicians, Body Shop Manager, Fleet Repair

Santa Fe Replacement Procedure

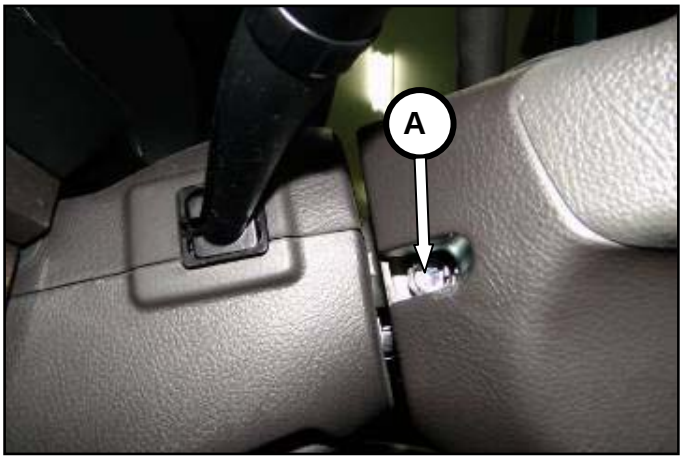
1. Turn the steering wheel to the straight ahead position, and then hold the steering wheel within ±5˚of straight ahead position.



2. Turn the ignition ON and record customer's AM/FM/XM radio preset stations.
Disconnect the battery negative cable and wait for at least thirty seconds before beginning work.

3. Loosen and remove the steering wheel air bag mounting bolts (A) on both sides.

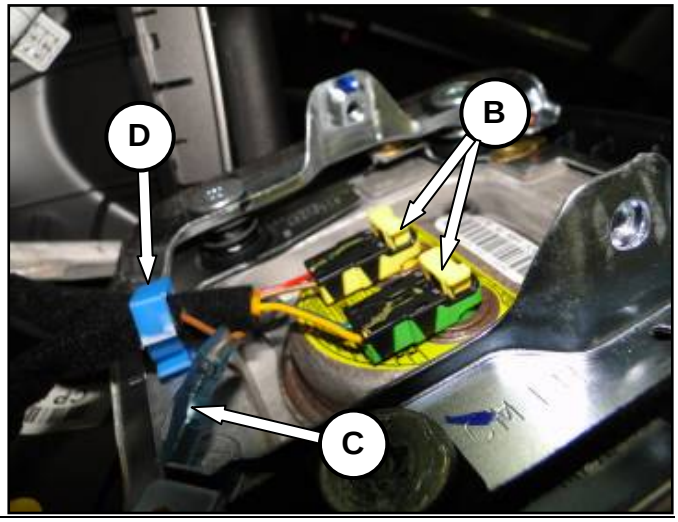
Tightening Torque:
5.7~7.9 lb-ft (7.9~10.7 Nm)



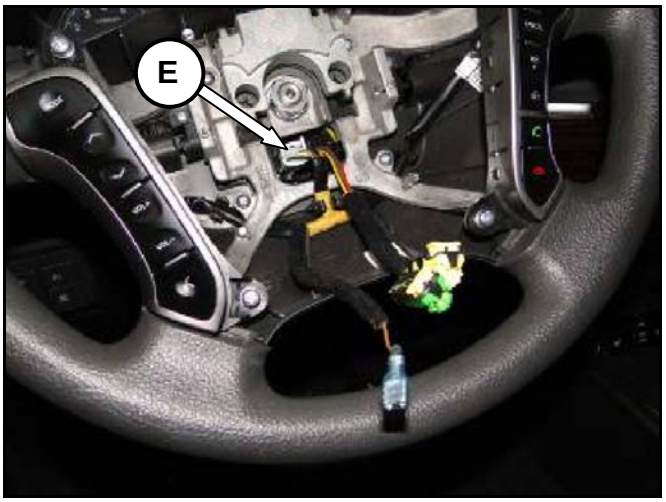
4. Disconnect the airbag connectors (B) after releasing the locking pins.
Disconnect the horn connector (C), and then unclip the wiring mounting clip (D). Then remove the driver airbag module.

CAUTION

The removed airbag module should be stored in a clean, dry place with the pad cover facing up.

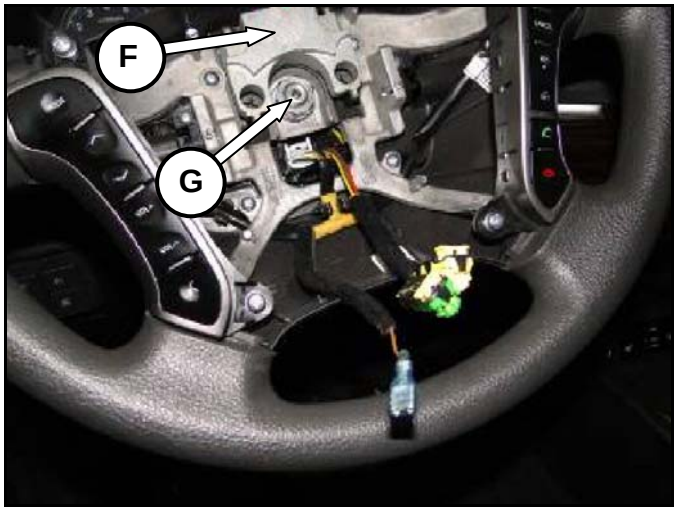


5. Disconnect the steering wheel control switch connector (E).



6. Remove the dynamic damper (F).
Remove the steering wheel lock nut (G).

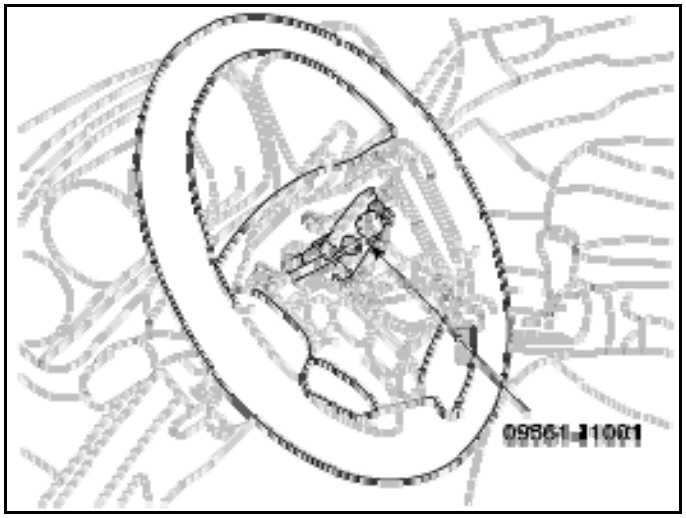
Tightening Torque: 29 ~ 36 lb-ft (40 ~ 50 Nm)



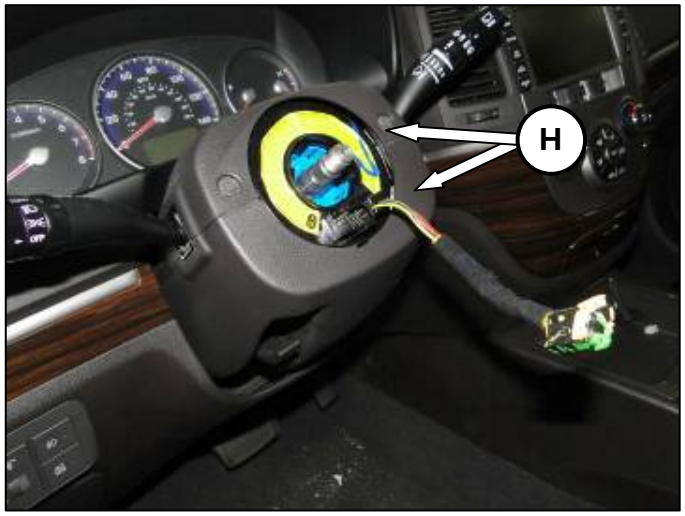
7. After making alignment marks on the steering wheel and shaft for reinstallation, remove the steering wheel using SST 09561-11001 or a generic steering wheel removal tool.

CAUTION

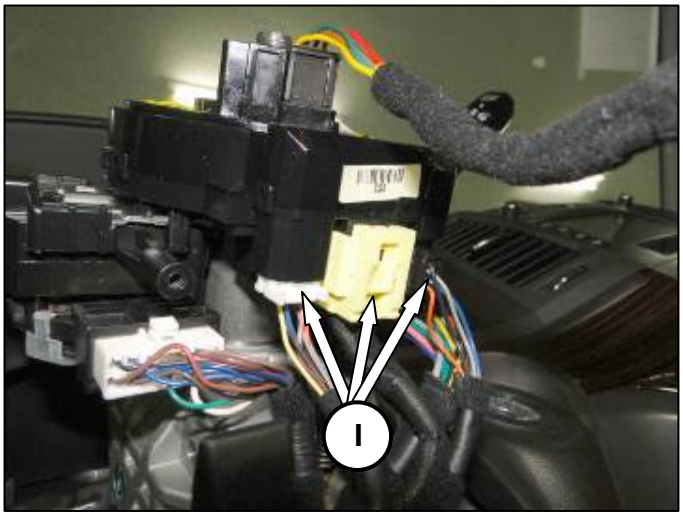
Do not hammer on the steering wheel to remove it.



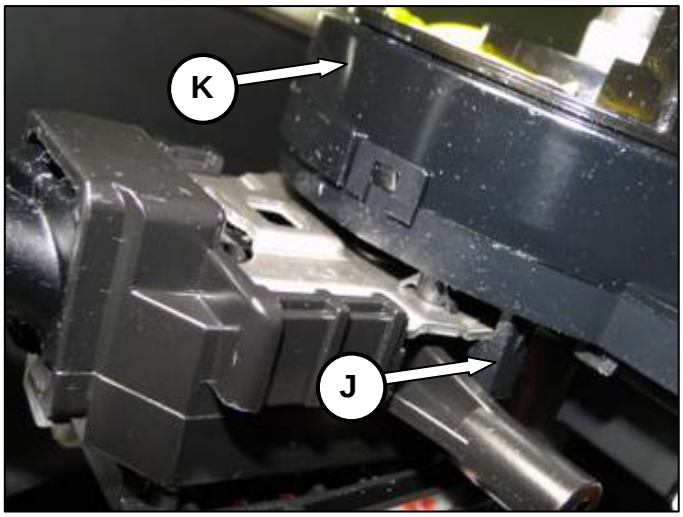
8. Remove the steering column upper/lower shrouds (H) after loosening the mounting screws (5 EA).



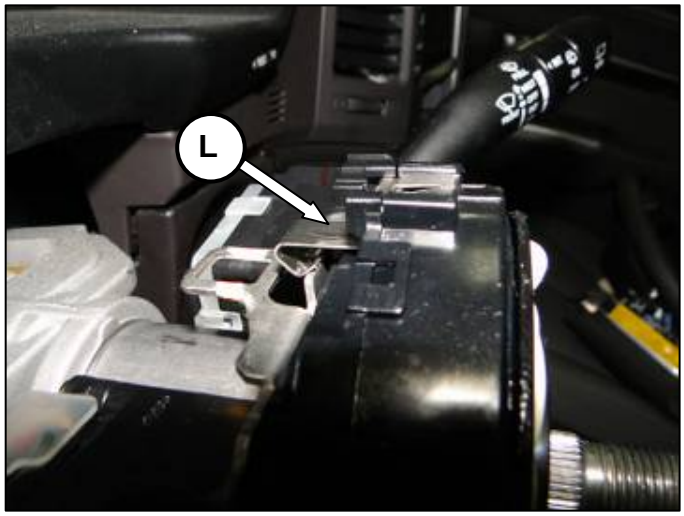
9. Disconnect the connectors (I) under the clock spring.



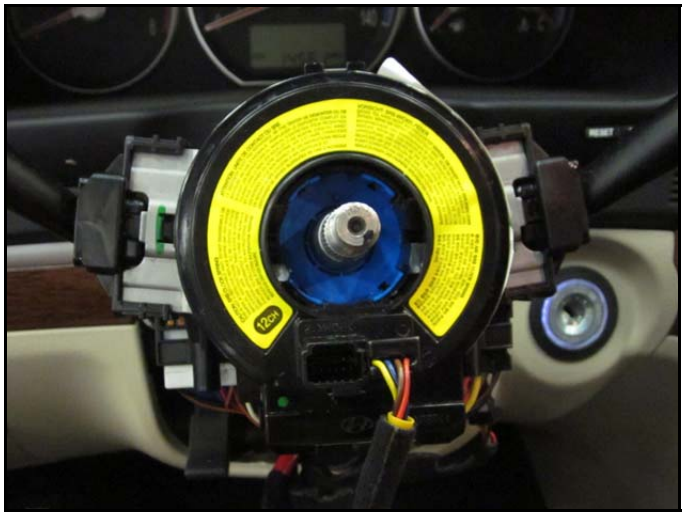
10. Unlock the clock spring mounting hooks (J) located at the sides of the clock spring (K).



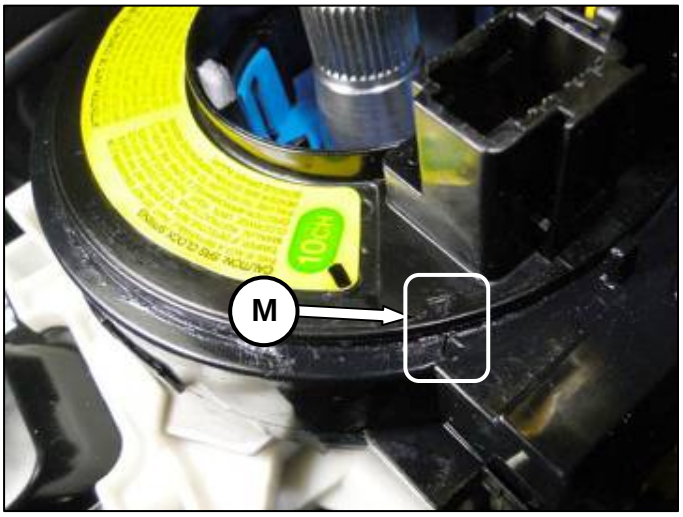
11. Unlock the clock spring upper mounting hook (L) and remove the clock spring from the column shaft.



12. Install a new clock spring to the steering column assembly. Connect the clock spring connectors under the clock spring.



13. When installing the clock spring, make sure to set the center position by aligning the marks between the clock spring and the cover. Align the marks (M) (▶◀) by turning the clock spring clockwise to the stop and then 2.0 revolutions counterclockwise.



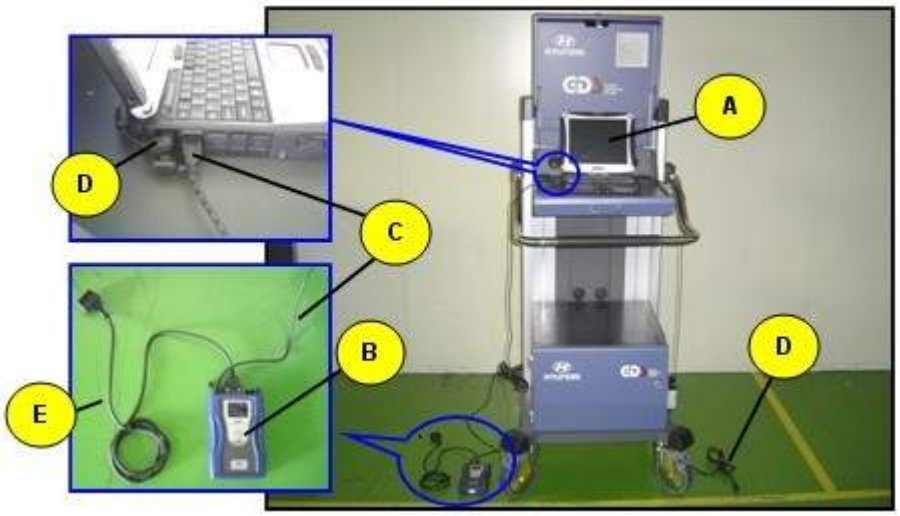
14. Reinstall all the parts removed in the reverse order of removal.

15. Perform the Steering Angle Sensor (SAS) calibration by following the procedures beginning on the next page and using the GDS.

✱ NOTE

Make sure that the steering is at the straight ahead position.

Santa Fe GDS INSTALLATION & SAS CALIBRATION PROCEDURE



A: Diagnostic terminal / B: VCI (Vehicle Communication Interface) / C: USB (Universal Serial Bus) cable / D: Power supply cable / E: DLC cable

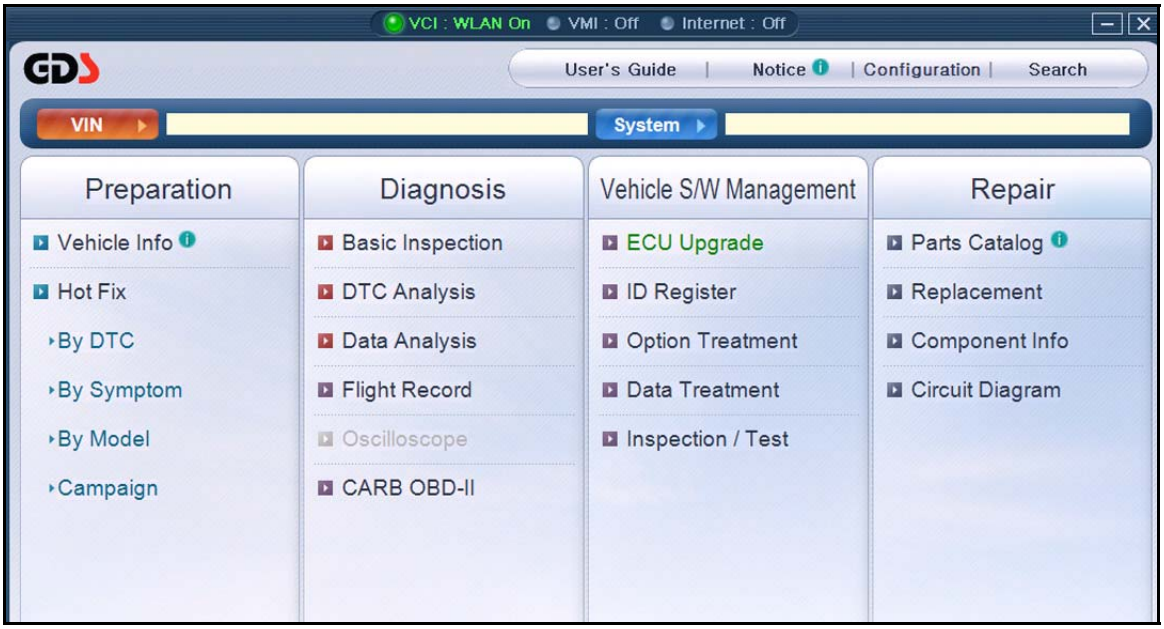
a) Connect the power supply cable to the diagnostic terminal.

b) Connect the USB cable between the VCI and the diagnostic terminal.

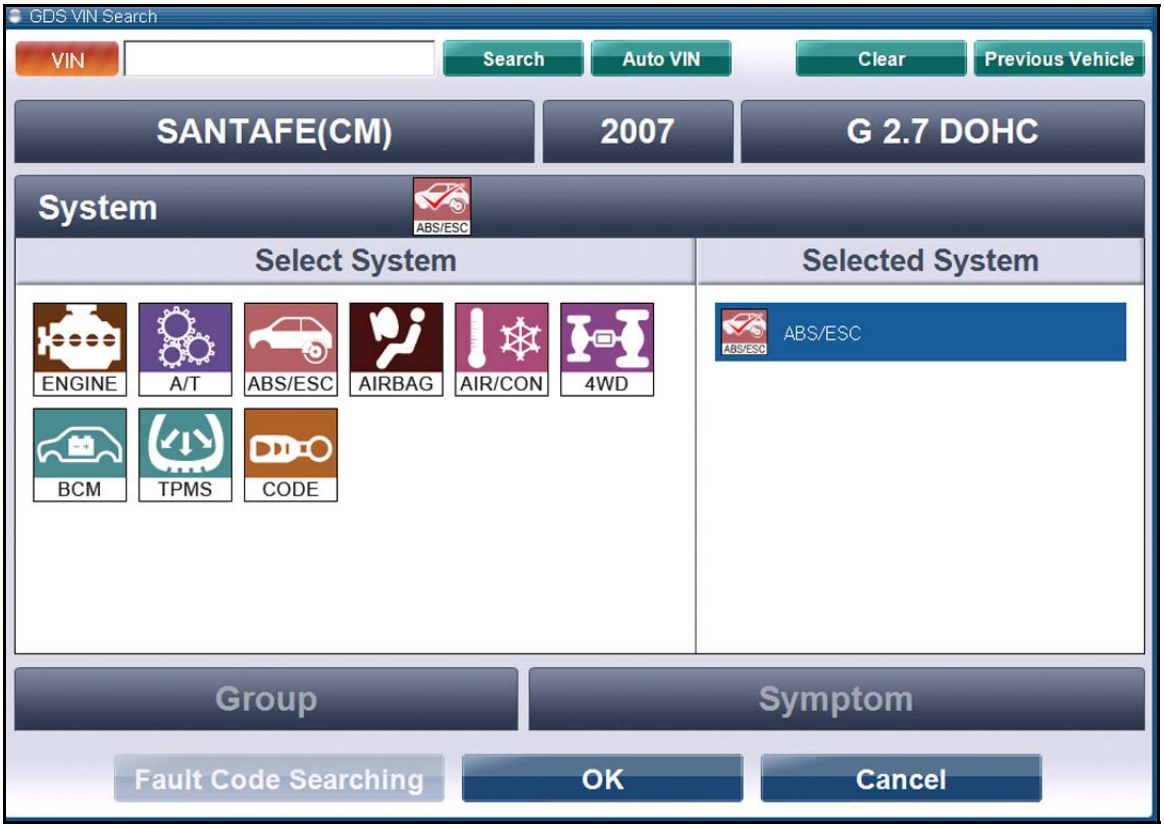
c) Connect the 16-pin DLC cable from the VCI into the vehicle's 16-pin connector under the driver side instrument panel.

d) Turn on the VCI and the GDS diagnostic terminal with the ignition key in the ON position.

e) Click to select **Data Treatment** under the **Vehicle S/W Management** section and the GDS will Auto VIN Detect.

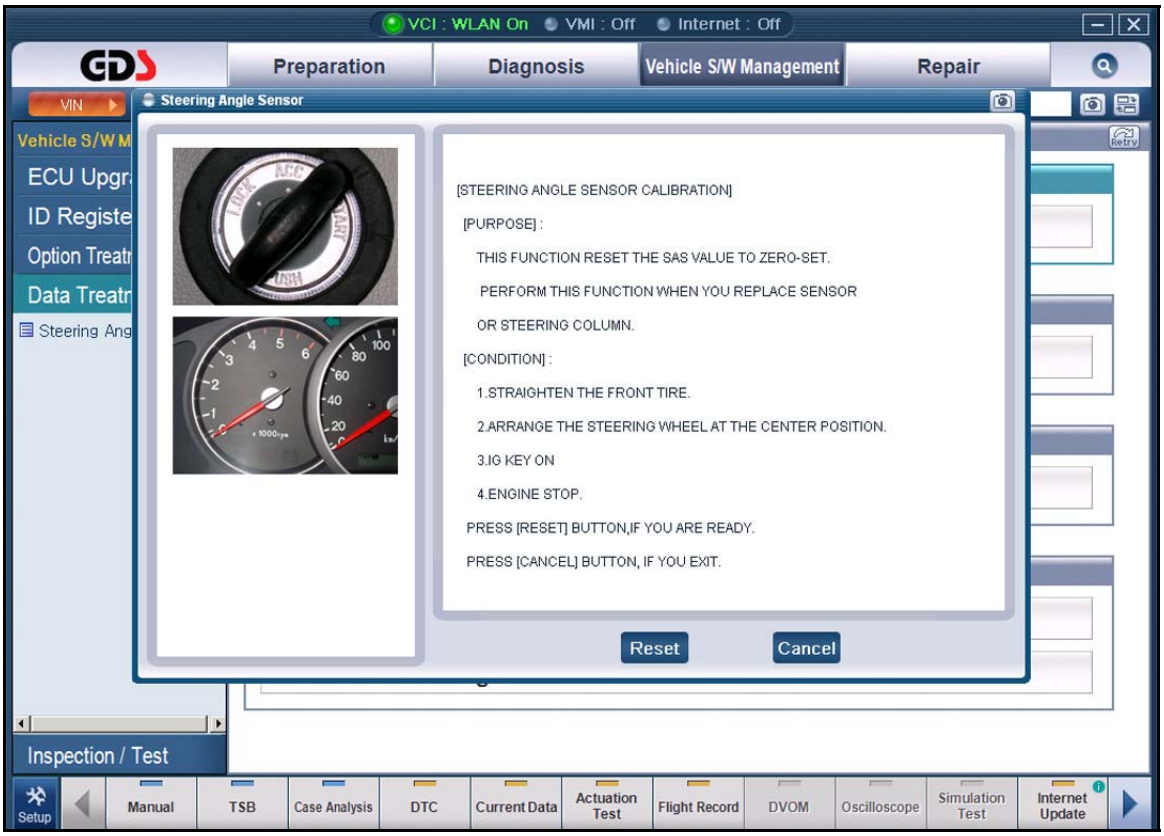


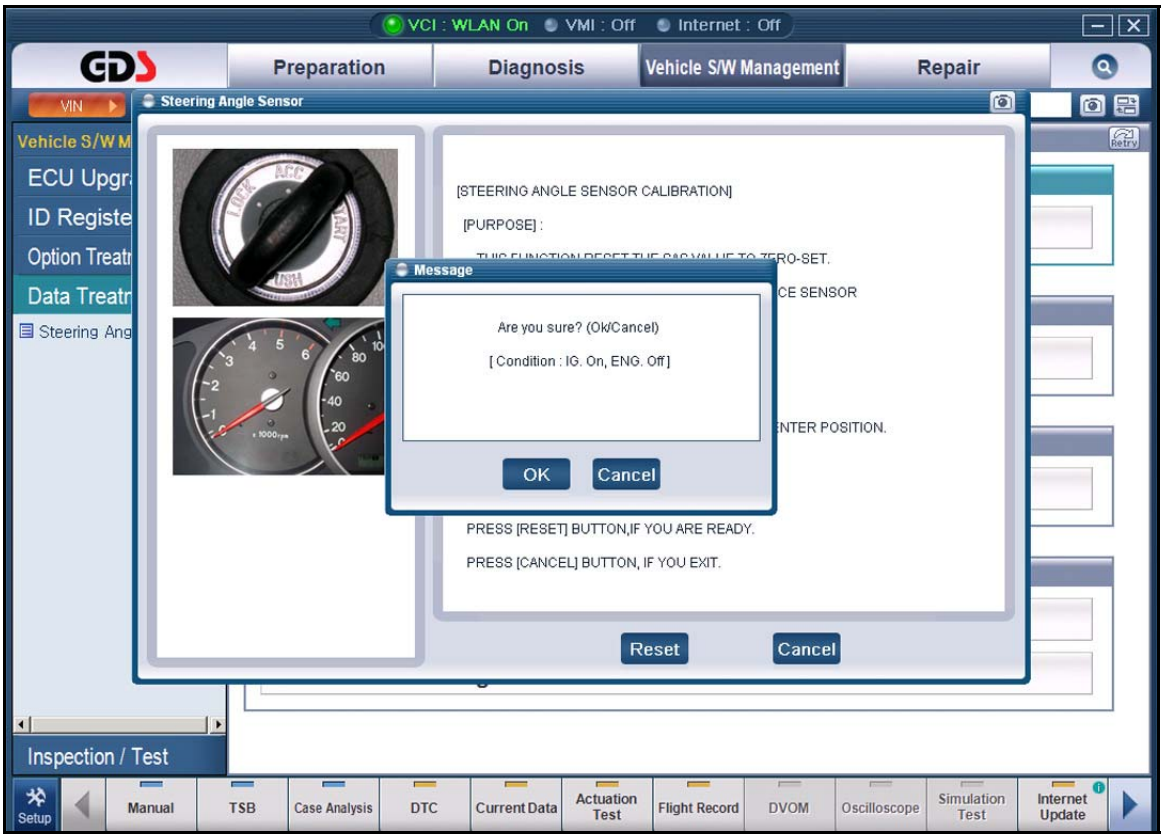
f) Click to select **ABS/ESC** as the system and then click **OK**.



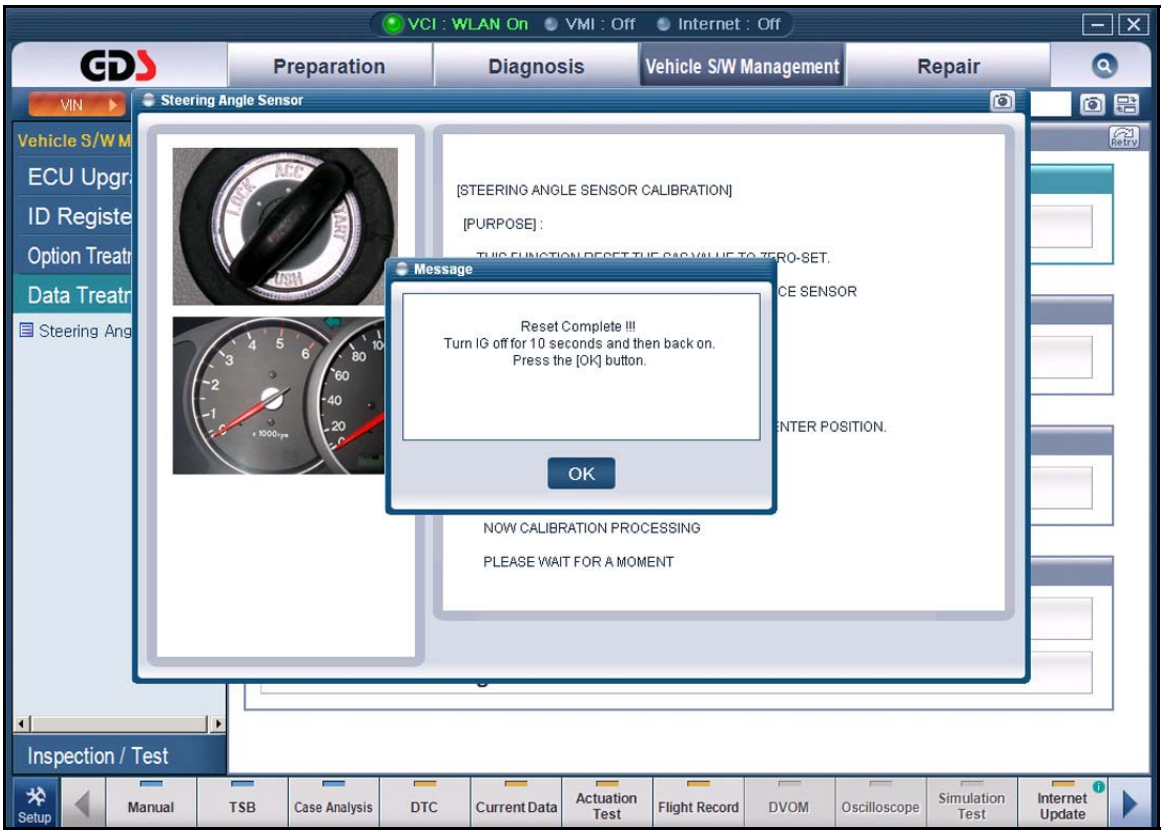
g) Click to select **Steering Angle Sensor**.

h) Make sure that calibration conditions are met. Click **Reset** button to calibrate and then click **OK** to proceed with the calibration.





i) After calibration is completed, click OK and turn the ignition OFF for 10 seconds.

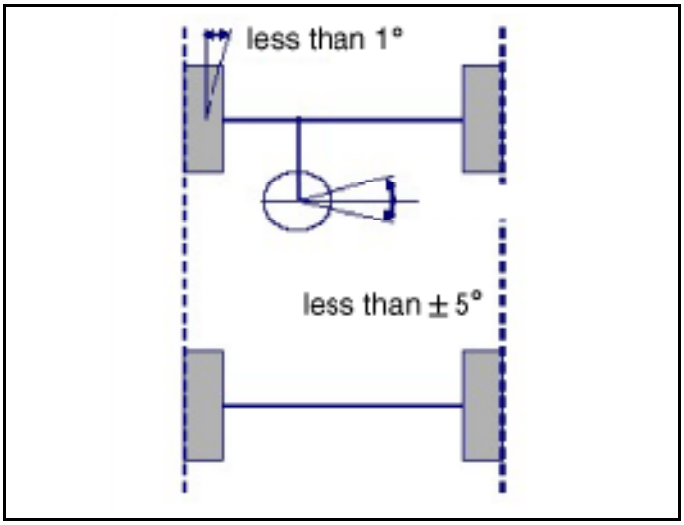


16. Check for any incidental Diagnostic Trouble Codes (DTCs) and clear any incidental DTC(s) if present.

17. Start the engine to confirm proper operation of the vehicle, steering wheel related components and switches. Reset the customer's radio preset stations.

<u>Veracruz</u> Replacement Procedure

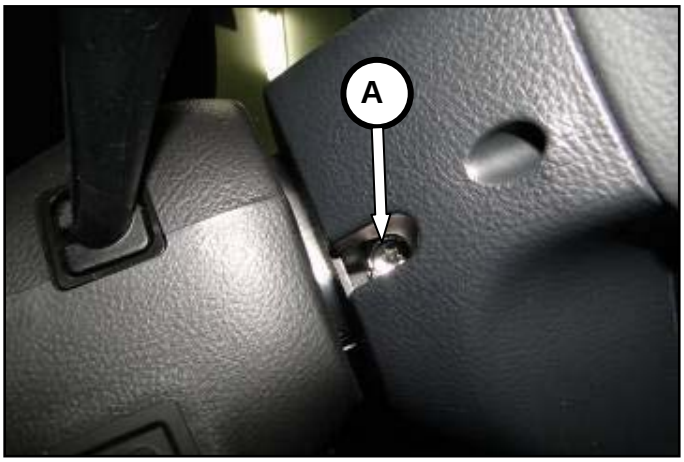
1. Turn the steering wheel to the straight ahead position, and then hold the steering wheel within ±5˚of straight ahead position.



2. Turn the ignition ON and record customer's AM/FM/XM radio preset stations.
Disconnect the battery negative cable and wait for at least thirty seconds before beginning work.

3. Loosen and remove the steering wheel air bag mounting bolts (A) on both sides.

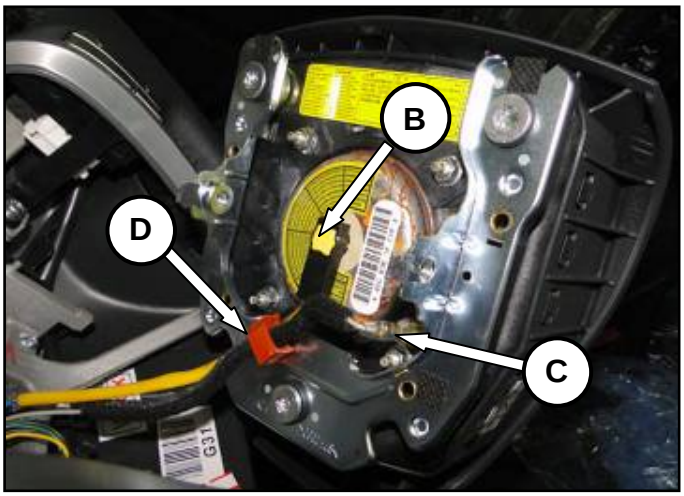
Tightening Torque :
5.7~7.9 lb-ft (7.9~10.7 Nm)



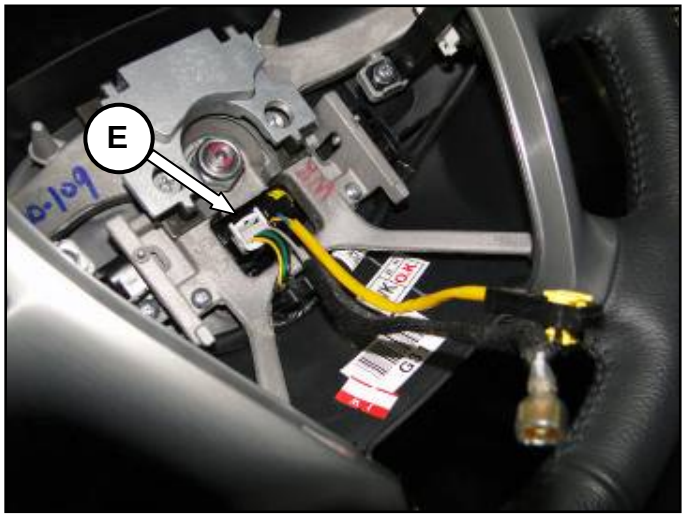
4. Disconnect the airbag connector (B) after releasing the locking pin.
Disconnect the horn connector (C), and then unclip the wiring mounting clip (D). Then remove the driver airbag module.

CAUTION

The removed airbag module should be stored in a clean, dry place with the pad cover facing up.

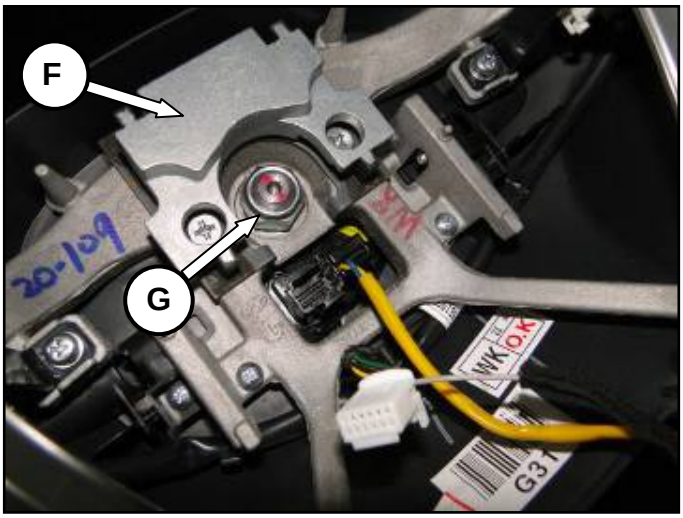


5. Disconnect the steering wheel control switch connector (E).



6. Remove the dynamic damper (F).
Remove the steering wheel lock nut (G).

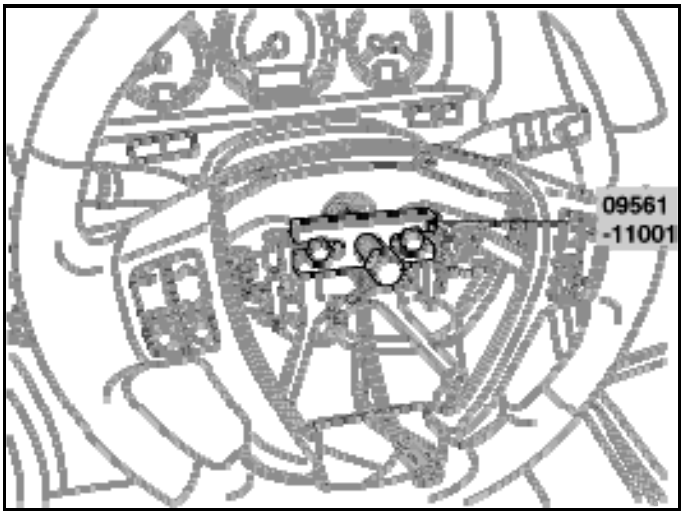
Tightening Torque:
29 ~ 36 lb-ft (40 ~ 50 Nm)



7. After making alignment marks on the steering wheel and shaft for reinstallation, remove the steering wheel using SST 09561-11001 or a generic steering wheel removal tool.

CAUTION

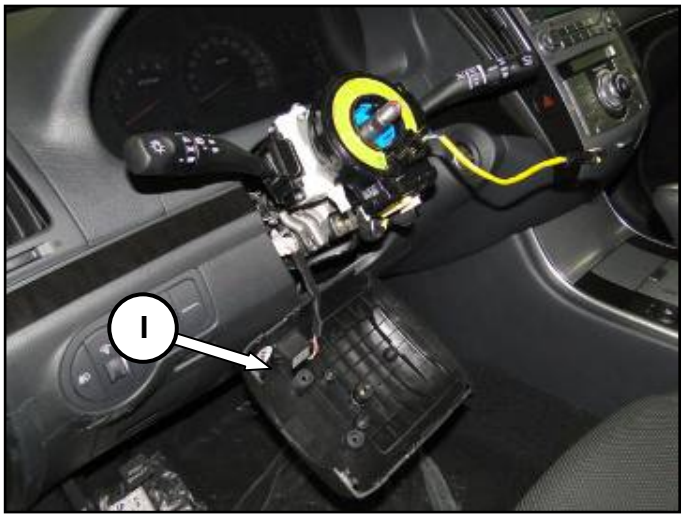
Do not hammer on the steering wheel to remove it.



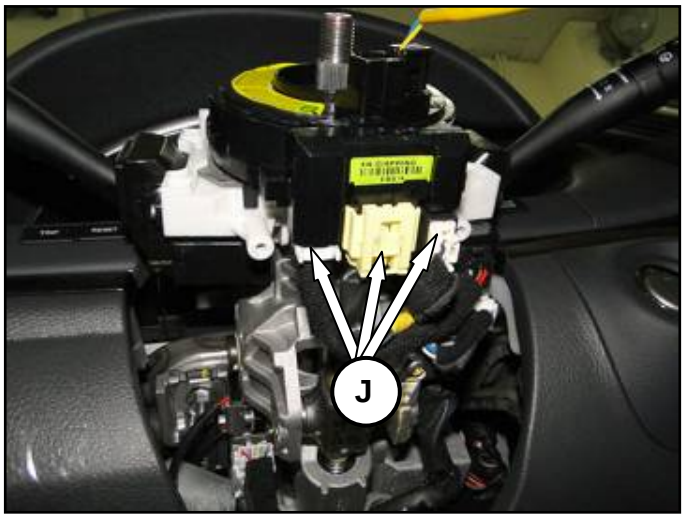
8. Separate the steering column upper and lower shrouds (H) by loosening the mounting screws.

   Remove the steering column upper shroud.

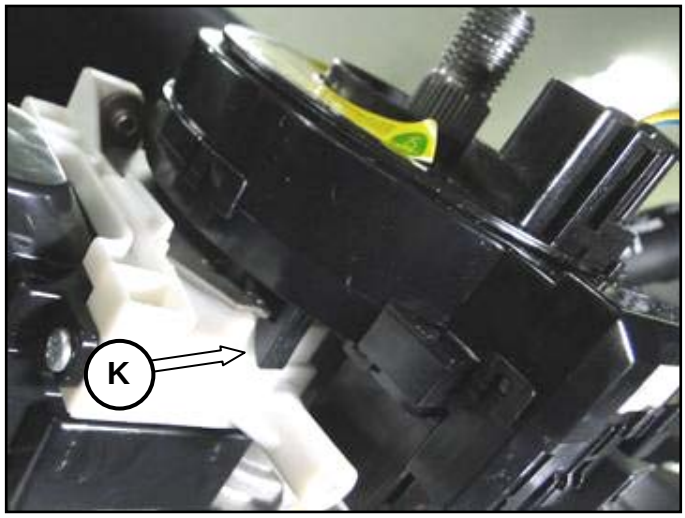
9. Lower the lower shroud (I) away from the steering column with the steering wheel tilt and telescopic switch connected. (There is no need to completely detach the steering column lower shroud).



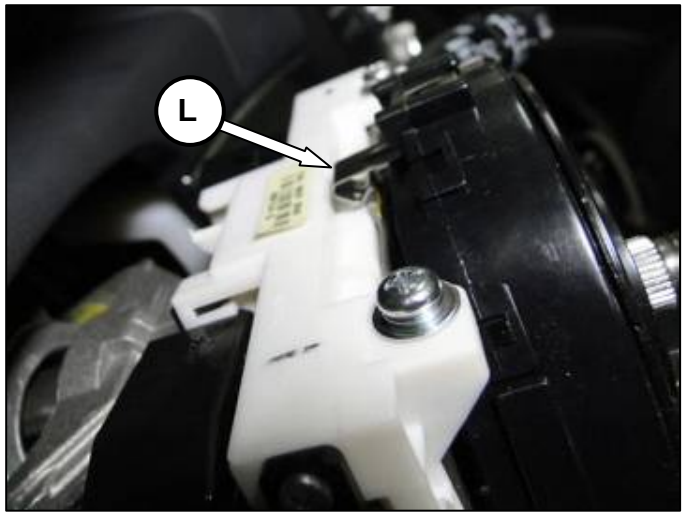
10. Disconnect the connectors (J) under the clock spring.



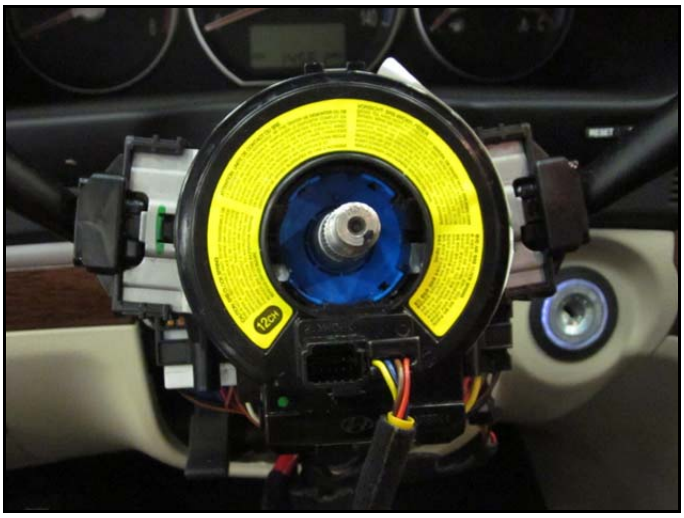
11. Unlock the clock spring mounting hooks (K).



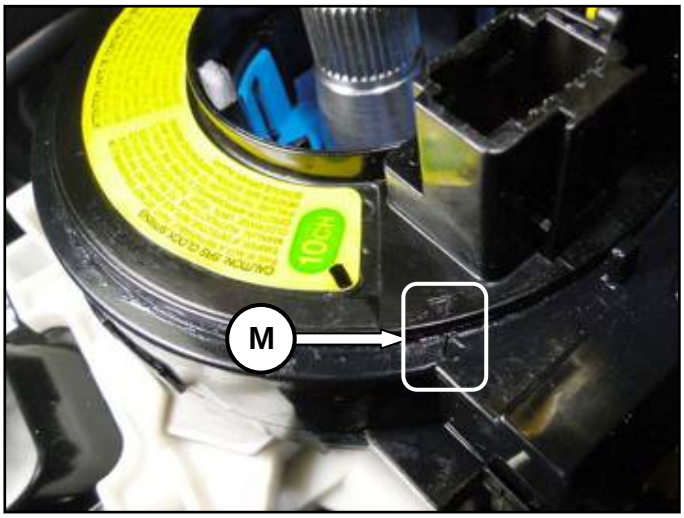
12. Unlock the clock spring upper mounting hook (L) and remove the clock spring assembly from the column shaft.



13. Install a new clock spring to the steering column assembly. Connect the clock spring connectors under the clock spring.



14. When installing the clock spring, make sure to set the center position by aligning the marks between the clock spring and the cover. Align the marks (M) (▶◀) by turning the clock spring clockwise to the stop and then 2.0 revolutions counterclockwise.



15. Reinstall all the parts removed in the reverse order of removal. Verify that the steering wheel is centered.

16. Check for any incidental Diagnostic Trouble Codes (DTCs) and clear any incidental DTC(s) if present.

17. Start the engine to confirm proper operation of the vehicle, steering wheel related components and switches.

    Reset the customer's radio preset stations.

Hyundai Motor America
P.O. Box 20839
Fountain Valley, CA 92728-9937

MOTOR VEHICLE RECALL

Dear 2007-2008 Veracruz or Santa Fe Owner:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

Hyundai has decided that a defect, which relates to motor vehicle safety, exists in certain model year 2007-2008 Hyundai Veracruz vehicles that were produced during the period beginning on December 26, 2006 through March 21, 2008 and model year 2007-2008 Hyundai Santa Fe vehicles that were produced during the period beginning on April 19, 2006 through March 20, 2008.

Federal law requires that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within ten days.

What is the problem?

- The clock spring contact assembly, installed behind the steering wheel, provides the electrical connection between the driver's air bag and the air bag control module that determines when the driver's air bag should deploy during an accident. The clock spring contact assembly in your vehicle may become damaged and experience high electrical resistance through usage over time. High electrical resistance in the driver's air bag clock spring contact assembly may cause the driver's air bag to not deploy in an accident when air bag deployment should occur. Vehicle occupants would be alerted to the problem because the "AIR BAG" warning lamp will illuminate.

  The above condition may increase the risk of injury resulting from a crash.

What should you do?

- If the **"AIR BAG" warning lamp remains ON when your vehicle is running**, call your Hyundai dealer to schedule an appointment so the dealer may diagnose and repair the cause for the warning lamp illumination and replace the driver's air bag clock spring contact assembly. This procedure will be performed at no charge to you. When you make an appointment, please confirm the dealer's schedule to determine how much time will be required to perform the work so you may plan appropriately.

  To help facilitate the process, you can schedule an online appointment. Please visit Hyundai.com, click on "Find a Dealer" and input your zip code. When your preferred dealer appears, click on "Schedule Service" under their address.

  - If you already have a log-on and password for online scheduling, enter them here, click on "Log In", then click on "Repair". Select "Campaign" and in the "Repair Service" box, enter the code: CAMP103 and click on "OK". Follow the instructions on the next screens to schedule your appointment.
  - If you do not have a log-on and password, complete the information under "new customer" and click on "Repair". Select "Campaign" and in the "Repair Service" box, enter the code: CAMP103 and click on "OK". Follow the instructions on the next screens to schedule your appointment.
  - If your preferred dealer does not have a link to schedule service online, please contact them via phone to schedule an appointment.

- If the **"AIR BAG" warning lamp does NOT REMAIN ON when your vehicle is running**, your driver's air bag will operate properly and we ask that you do not schedule an appointment to have this recall repair performed at this time because sufficient quantities of the necessary parts are not yet available for all vehicles. Please keep this owner notification letter in your vehicle with other important vehicle documents and if in the future the **"AIR BAG" warning lamp remains ON when your vehicle is running**, call your Hyundai dealer to schedule an appointment so the dealer may diagnose and repair the cause for the "AIR BAG" warning lamp illumination and replace the clock spring contact assembly. This procedure will be performed at no charge to you.

What will Hyundai do?

- The Hyundai dealer will replace your vehicle's driver's air bag clock spring contact assembly if the **"AIR BAG" warning lamp remains ON when your vehicle is running**. This procedure will be performed at no charge to you. When you make an appointment, please confirm the dealer's schedule to determine how much time will be required to perform the work so you may plan appropriately.

  Hyundai will provide a lifetime warranty for the driver's air bag clock spring contact assembly for your vehicle.

What if you have other questions?

- If you have any difficulty having this repair performed, we recommend that you contact the Hyundai Customer Connect Center at 1-800-633-5151 or ConsumerAffairs@hmausa.com. If you are still not satisfied that we have remedied this situation without charge, and within a reasonable amount of time, you may wish to write to the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Avenue, SE, Washington, D.C. 20590, or call their toll-free Vehicle Safety Hotline at 1-888-327-4236 (TTY: 1-800-424-9153), or go to http://www.safercar.gov.

Reimbursement Notification

- Hyundai has a program for reimbursing owners of 2007-2008 Veracruz vehicles produced during the period beginning on December 26, 2006 through March 21, 2008 and 2007-2008 Santa Fe vehicles produced during the period beginning on April 19, 2006 through March 20, 2008, who paid to have the recall condition remedied after September 8, 2010 and prior to receiving this recall notification letter.

  To obtain information about reimbursement from Hyundai, please call the Hyundai Customer Connect Center at 1-800-633-5151. Ask about reimbursement information for campaign 103.

We urge your prompt attention to this important safety matter.

Hyundai Motor America